REMARKS

THE AMENDMENTS

Applicants have amended claim 42 to recite the biological activity is selected from the group consisting of promoting endothelial cell adhesion, spreading and migration and to delete "preventing". Support for the amendments is found, for example, at page 41, line 27 – page 46, line 12.

Applicants have amended claim 43 to correct a typographical error.

Applicants have added claims 55-59. Support for the claims is found throughout the specification, for example, at page 14, lines 16-27; page 26, lines 22-25; page 31,line 19 – page 32, line 5; page 41, line 27 – page 46, line 12 and page 60, line19 – page 61, line 6.

These claim amendments do not constitute new matter. Upon entry of the amendments, claims 39-45 and 49-59 will be pending in the application. Of these, claims 39-41, 44, 45 and 49-54 are withdrawn. Claims 42, 43 and 55-59 are under examination. Applicants request entry of the amendments and reconsideration of the claims.

THE REJECTIONS

The Restriction Requirement

Applicants note that the election of Group 14 is made final. Applicants reserve the right to make further arguments at a later time.

35 U.S.C. § 112, First Paragraph – Enablement

Claims 42-43

The Examiner has rejected claims 42-43 under 35 U.S.C. § 112, first paragraph, for lack of enablement. The Examiner states that the specification, while being enabling for "a method of treating ischemia in a subject in need thereof by administering an effective amount of a composition comprising a fragment comprising amino acids 1-200 of the N-terminus of Nogo-B" does not provide enablement for a method as recited in claim 42. The Examiner states that the specification fails to provide guidance for the successful treatment of diseases or conditions besides ischemia.

Specifically, the Examiner states that the limited results presented for treatment of ischemia are not sufficient to enable the breadth of the claims and are not predictive of in vivo efficacy for treatment of all pathological vascular remodeling states. The Examiner further states that the specification is non-enabling for a method of administering unlimited and unidentified fragments encompassed by the scope of the claims. Specifically, the Examiner states that it would require undue experimentation to determine which fragments of Nogo-B having "a biological activity" would be encompassed by the scope of the claims.

Applicants traverse. However, solely to expedite prosecution of this application, applicants have amended claim 42 (and therefore, claims dependent therefrom) to limit to treatment and to limit the fragment to one that retains a biological activity selected from the group consisting of promoting endothelial cell adhesion, spreading and migration. Applicants respectfully submit that the claims, as amended, are fully enabled by applicants' specification.

Applicants disagree with the Examiner's assertion that it would require undue experimentation to determine which fragments of Nogo-B having "a biological activity" would be encompassed by the scope of the claims. Applicants have demonstrated that cell adhesion, spreading and migration can be measured in vitro at Examples 2-4 (see, e.g., page 41, line 27 – page 46, line 12). One of skill in the art using the teaching of specification could determine whether a fragment retains a biological activity selected from the group consisting of promoting endothelial cell adhesion, spreading and migration by routine experimentation.

Applicants have demonstrated that overexpression of full-length Nogo-B in wild-type blood vessels decreases intima formation after vessel injury in vivo and that overexpression of Nogo-B in Nogo-A/B (-/-) mice prevents injury-induced neointima formation in vivo at Examples 9 and 10, respectively (see, e.g., page 54, line 11 to page 59, line 5). These experiments were performed using the femoral arterial injury model which is an art accepted in vivo model of pathological vascular remodeling (see Roque et al., "Mouse model of femoral artery denudation injury associated with the rapid accumulation of adhesion molecules on the luminal surface and recruitment of

neutrophils," Arterioscler Thromb Vasc Biol., 20:335 (2000), Appendix A). Therefore, having shown the effectiveness of Nogo-B in vivo in the femoral arterial injury model, the specification does provide guidance for the successful treatment of diseases or conditions characterized by pathological vascular remodeling besides ischemia. The data provided in the instant specification, thus, is sufficiently predictive of in vivo efficacy for treatment of diseases or conditions characterized by pathological vascular remodeling in general.

In view of the above teachings, applicant respectfully submits that the specification provides adequate enablement for the claims as amended. Accordingly, applicants respectfully request that the Examiner withdraw this rejection.

35 U.S.C. § 112, Second Paragraph

Claims 42-43

The Examiner has rejected claims 42-43 under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner states that claim 42 is vague and indefinite because it recites the non-elected condition "preventing"; fails to recite the specific condition to be treated; and recites the terms "fragment" and "biological activity", the metes and bounds of which are unclear.

Applicants traverse. However, solely to expedite prosecution of this application, applicants have amended claim 42 (and therefore, claims dependent therefrom) to recite a biological activity selected from the group consisting of promoting endothelial cell adhesion, spreading and migration and to no longer recite "preventing."

A condition or disease characterized by pathological vascular remodeling is described in the specification as remodeling that occurs under pathological conditions at page 16, lines 2-8. Remodeling that occurs under pathological conditions is well known to those of skill in the art. The meaning of the term in the claims, thus, is clear.

Applicants submit that the term "fragment" is modified by the functional limitation "retaining a biological activity selected from the group consisting of promoting endothelial cell adhesion, spreading and migration." With applicants' specification in hand, a person of ordinary skill in the art could readily determine whether a fragment

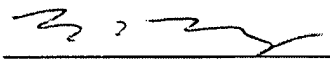
retains the ability to promote endothelial cell adhesion, spreading and/or migration for the reasons described in response to the enablement rejection.

Applicants submit that the claims, as amended, are definite and request that the Examiner withdraw this rejection.

Conclusion

Applicants request favorable consideration of the application and early allowance of the pending claims. To that end, the Examiner is invited to telephone the undersigned to discuss any issue pertaining to this reply.

Respectfully submitted,



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